IBM Cloud Discussion
GTA Technology Summit

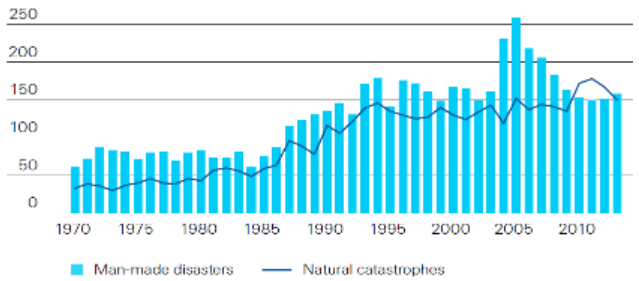
May 11, 2015

SOFTLAYER®
an IBM Company

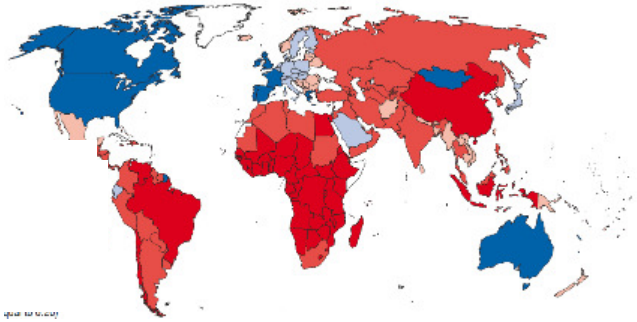
Governments are being hit by multiple disruptive shifts – urbanization, aging populations and structure of the state economy

- High competition for residents and businesses
- Increase of dependency ratio
- Change in citizen demands
- Increase in catastrophic events
- Unstable economic conditions

Number of Catastrophic Events, 1970 – 2013[1]



2014 GDP Growth decline[2]



Source: [1] Swiss Re. 2014. *Natural catastrophes and man-made disasters in 2013: large losses from floods and hail; Haiyan hits the Philippines.* Sigma Study, No 1/2014.; [2] http://www.imf.org/external/Pubs/ft/weo/2014/01/pdf/text.pdf

As they advance along their transformational journey, government leaders focus on four key imperatives

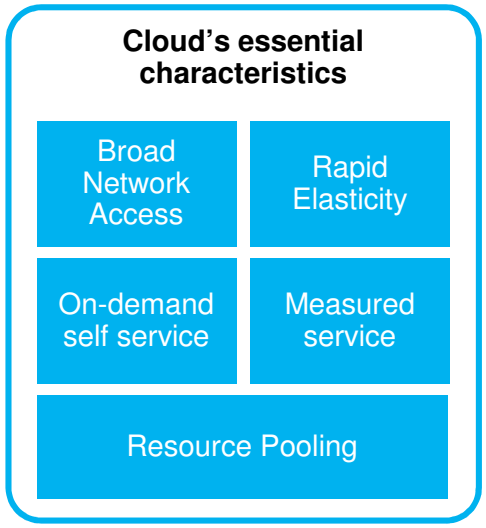
Improve Health and Social Programs	Grow Sustainable Economies	Strengthen Security and Public Safety	Protect the environment and improve resilience
Support the public's health and welfare with personalized services	Improve fiscal management and revenue collection	Optimize data and support functions, create safer communities	Improve performance and resilience of critical infrastructure and ensure the sustainability of vital resources

Cloud technology provides the means to meet economic challenges to drive towards new growth

Sources: http://www-935.ibm.com/industries/government/

Cloud is a competitive asset that expands economic potential, promoting agility, security, efficiency and cost control

Cloud computing is a pay-per-use consumption and delivery model that enables real-time delivery of configurable computing resources



Source: NIST, IBM IBV Power of cloud study

Cloud empowers 6 benefits for governments

- Speed, agility, and scalability
- Security rich and highly available
- Improved Efficiency
- Cost optimized
- Masked complexity
- Ecosystem connectivity

What is driving IT demand in today's IT organizations?

"If you always do what you always did then you will always get what you always got." – Albert Einstein

SoftLayer – stands apart from other cloud vendors

The initial cloud revolution was based on assumptions such as:

All resources are **virtualized**

All resources are **shared**

But cloud computing needs have evolved.

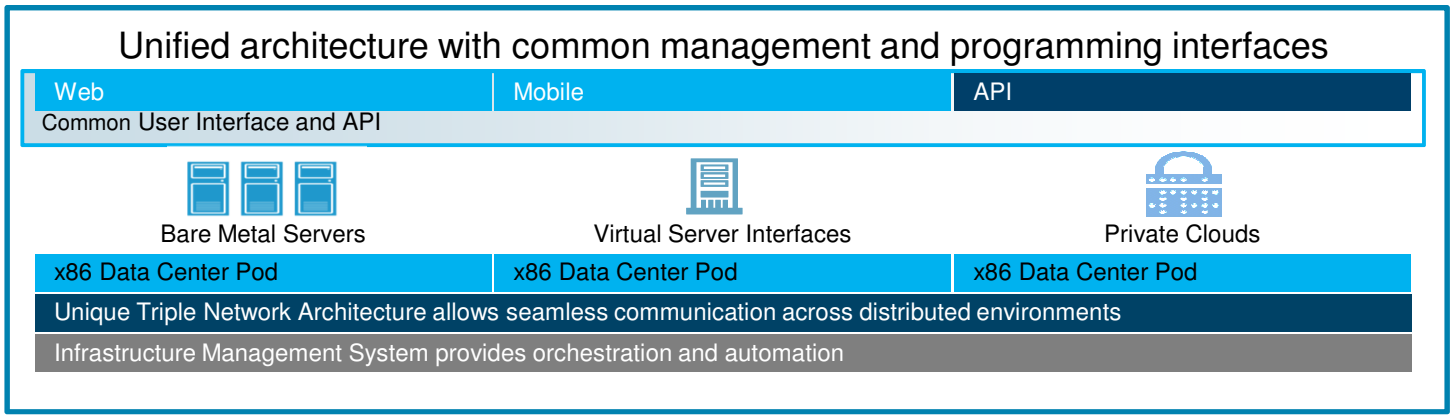
SoftLayer® embraces the idea that:

… virtualization is a choice with a flexible set of options

… resources can be **shared, dedicated** or **mixed**

But you have the ultimate CHOICE

IBM SoftLayer is an Infrastructure as a Service offering, providing performance, flexibility and control through automation and APIs



Expanding **global footprint** of data centers & points of presence for **direct access** to network backbone

Triple network architecture with carrier-grade reliability

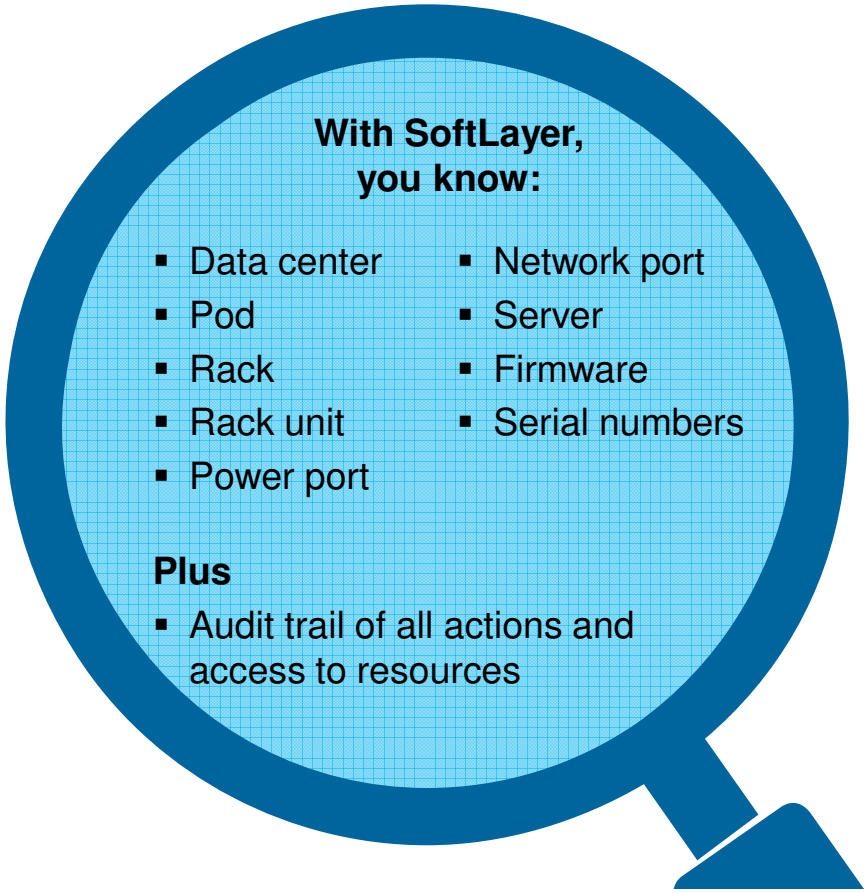
Performance

Over **2,000 Gbps** of connectivity between data centers

Transparency from network topology down to the hardware

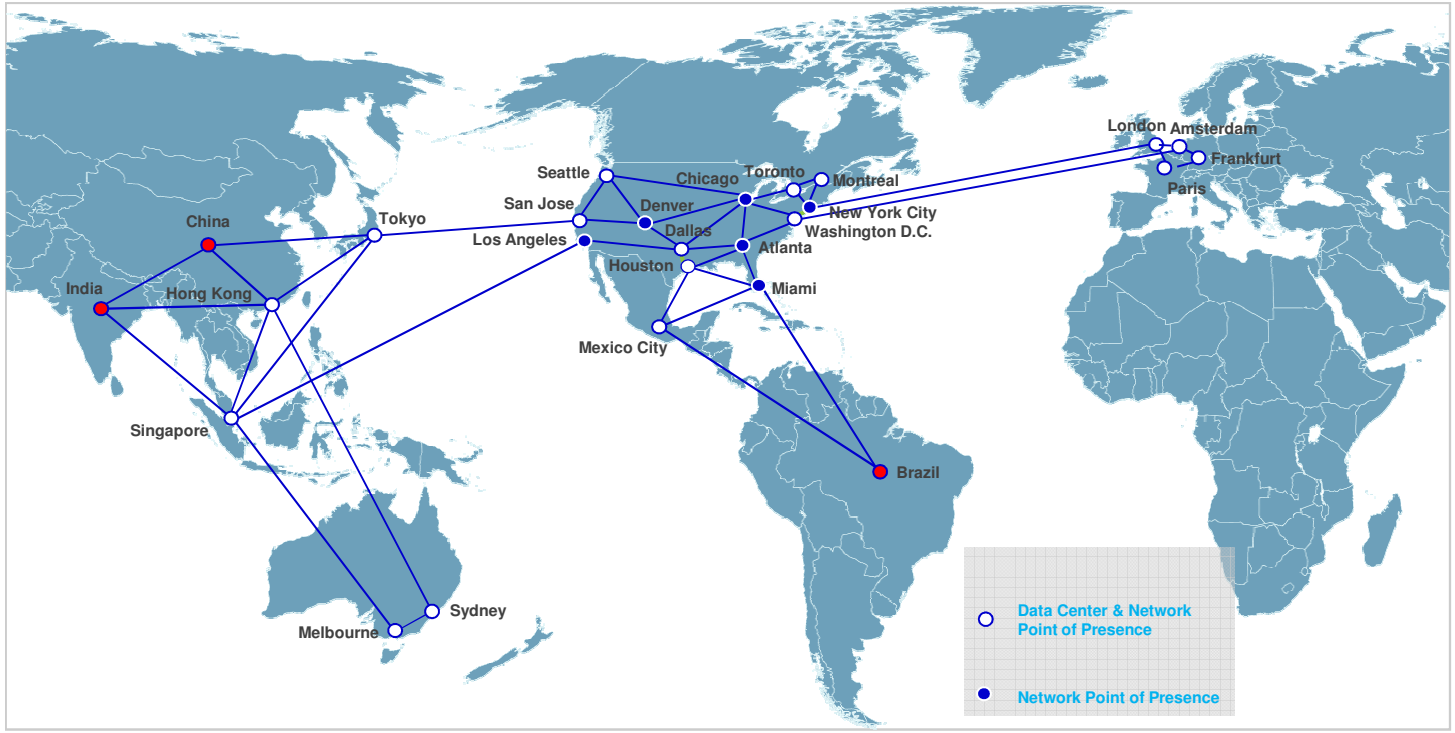
With other cloud providers, you may only know:

- Zone
- Maybe the data center



The resulting **visibility** means you can have more **control** over your application and its performance

Government clients use private network between data centers at no charge



Benefits:

- Geographically dispersed points of presence (PoPs) for **connectivity of carrier-grade network backbone closer to the user**
- PoPs and **2,000+ Gbps connectivity between data centers** globally deliver exceptional bandwidth and connectivity
- **No network charges between SoftLayer data centers** or other IBM Cloud data centers

SoftLayer Security and Compliance Certifications

SOC2 Report

Safe Harbor
Self-Assertion

FFIEC
Risk Assessment

HIPAA Ready
Will sign BAA

PCI Ready
AOC in place

STAR Certification

FISMA Moderate

FedRAMP pATO

ISO 27001

Intel "Trusted Execution Technology" (Intel TXT) hardware based mechanism for verifying and reporting on platform trust.

Aligned with US Government Standards – based on NIST 800-53

SP800-53 is a catalog of security and privacy controls originally defined for US federal government information systems

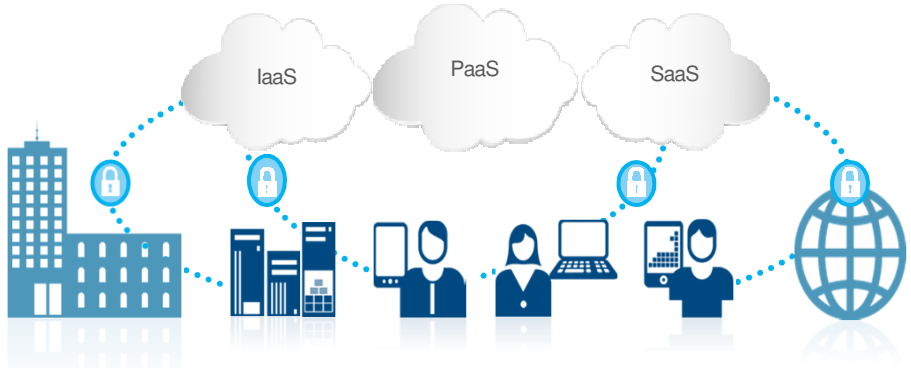
- Developed in response to the US Federal Information Security Management Act (FISMA)

Management Controls
Security Assessment and Authorization
Planning
Program Management
Risk Assessment
System and Services Acquisition

Technical Controls
Access Control
Audit and Accountability
Identification and Authentication
System and Communications Protection

Operational Controls
Awareness and Training
Configuration Management
Contingency Planning
Incident Response
Maintenance
Media Protection
Physical and Environment Protection
Personnel Security
System and Information Integrity

Increased security and compliance for your Cloud environment



Protect Data

Identify vulnerabilities and help prevent attacks targeting sensitive data

Manage Access

Safeguard people, applications, and devices connecting to the cloud

Gain Visibility

Monitor the cloud for security breaches and compliance violations

Optimize Security Operations

Deliver a consolidated view of your security operations – at unprecedented speed and agility

SoftLayer Use Cases

Data Archive

Geo-diverse backup

Disaster Recovery

Video Management Law Enforcement

Web Application Hosting

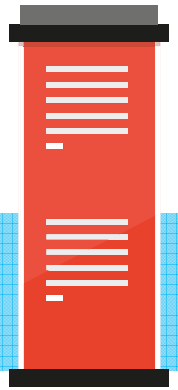
Dev/Test

Solution Recap – getting started with SoftLayer in Georgia

Early cloud models—shared, virtualized resources—are no longer enough to achieve cloud's potential innovation.

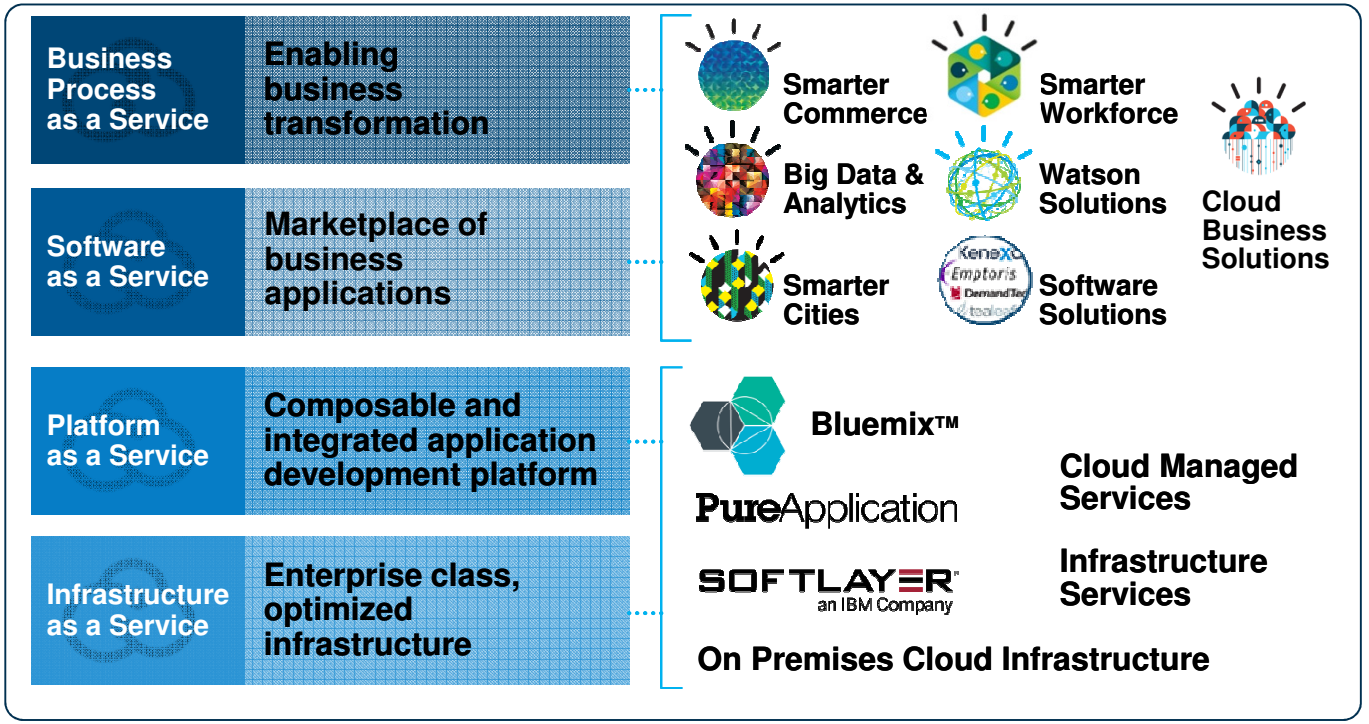
With a SoftLayer solution, you can gain:

- The ability to combine bare metal or virtual servers, shared or dedicated environments, and public, private, hybrid or dynamic hybrid models.
- Automation and standardization across the data centers to strengthen security → in process of gaining highest levels of cloud federal certification across parts of SL
- **State of GA** – IBM contract with Georgia Technology Authority (GTA) enables prospective clients to purchase SoftLayer without having to bid
- Clients not contractually obligated to remain on SoftLayer – Ability to leave at any time with no penalty



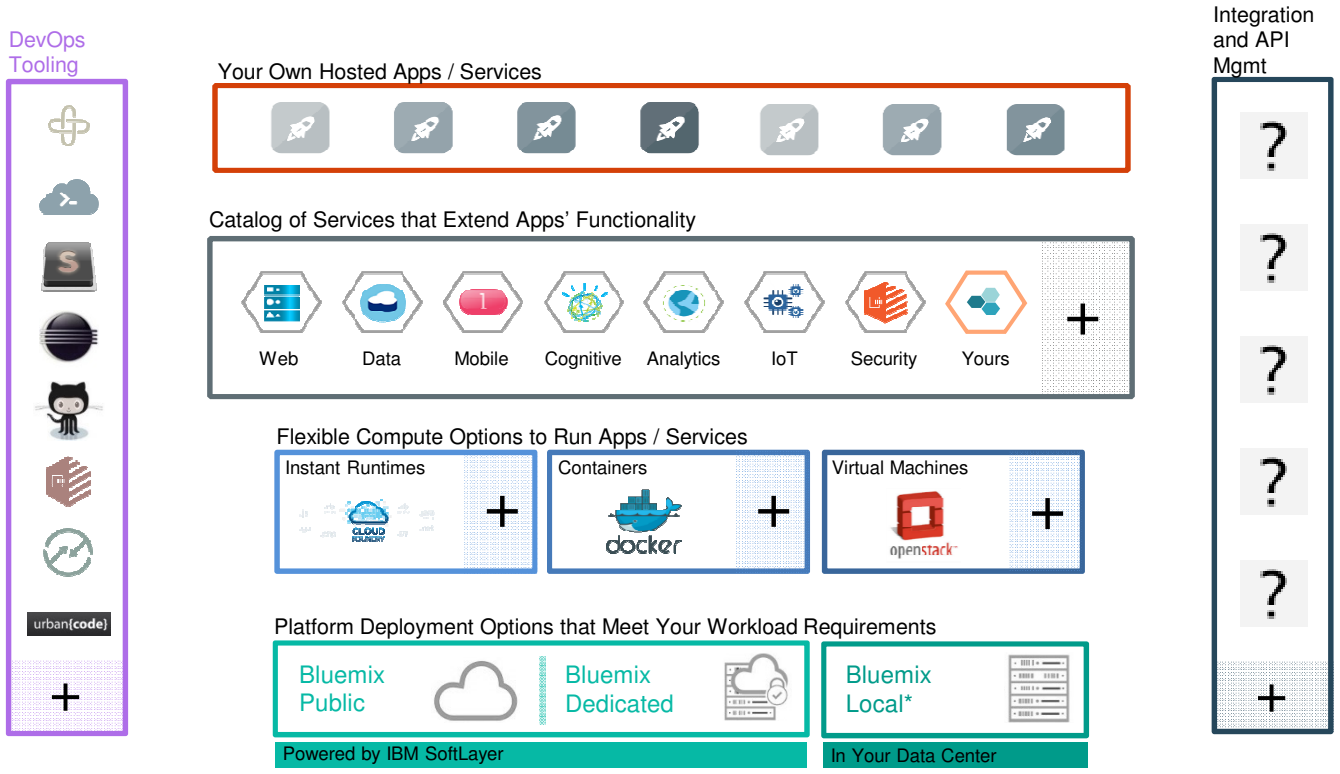
A SoftLayer solution is backed by the expanse of resources and long-standing innovation of IBM, delivering efficiency to your organization

Comprehensive ‘stack’ of cloud services provides innovation and workload opportunities on top of SoftLayer



Public. Private. Hybrid.

BlueMix allows you to more quickly develop and implement new apps



*Bluemix Local coming Summer 2015

Putting it all together: Why the Weather Channel chose IBM Cloud

The Weather Channel

Watson Analytics for Weather

Cloud and Mobile App Developer Tools

Business and Operational Weather Expertise

POWERED BY SOFTLAYER®

IBM Bluemix™

Clients have many decisions and choices – from Traditional IT, Managed Services, & Cloud

IBM Cloud allows optimized workload `placement in support of client strategies